THE IMPORTANCE OF PEER REVIEW IN THE SCIENTIFIC PROCESS

HANFORD THYROID DISEASE STUDY (HTDS)

May 1999

The goal of the Hanford Thyroid Disease Study is to identify any possible link between past exposures to I-131 from the Hanford facility and the risk of thyroid disease. Because of both the public health implications and the complex scientific issues associated with this study, it is critically important that each step in the assessment be openly and objectively evaluated not only by the affected public, but also by the scientific community. This type of technical evaluation, often called peer review, is a critical component in the scientific process.

Peer review ensures that the scientists conducting the study apply methods that are appropriate to the problem being investigated, it promotes the free exchange and discussion of ideas, and often leads to improvements in both the analysis and the presentation of the study data. In addition, review of the study methods and results by knowledgeable, yet objective, experts can increase the credibility of the work within both the scientific and public communities. Usually, to ensure objectivity, the peer review process is confidential with unknown reviewers evaluating the work of unidentified investigators. However, the Centers for Disease Control and Prevention (CDC) is committed to public involvement. This means that since its inception, the Hanford Thyroid Disease Study has been conducted with complete openness to public scrutiny. The CDC is dedicated to continuing this openness throughout the review process for the draft Hanford Thyroid Disease Study Report.

Preliminary Technical Review of the Hanford Thyroid Disease Study Draft Final Report

The CDC received the Hanford Thyroid Disease Study Draft Final Report from the Fred Hutchinson Cancer Research Center (FHCRC) on September 30, 1998. Shortly after that, copies were also sent to a group of scientists who were asked to provide their opinions on the methods, analysis and interpretation of results summarized in the draft report.

The CDC, together with the study’s principal investigators from the Fred Hutchinson Cancer Research Center, selected the scientists to be used as reviewers — based on their recognized expertise in areas such as diseases of the thyroid, radiation...
epidemiology, and statistics. In addition, a group of scientists from within CDC was also asked to review the draft report. The reviewers were asked to study the draft report and share their opinions with the study team, the CDC and each other at a meeting held in Atlanta on November 13, 1998. In addition, reviewers were asked to provide CDC with written summaries of their evaluation of the methods, analysis and presentation of results described in the draft report.

CDC has made this first set of review comments available in a document entitled, “Preliminary Technical Review of the Hanford Thyroid Disease Study Draft Final Report” (available on the CDC web site or by writing CDC at the address provided in the sidebar on previous page). This document lists the scientists who provided preliminary technical reviews of the draft report, verbatim copies of their written comments to CDC, and minutes of the November 13, 1998 meeting of these reviewers. Two important ideas should be kept in mind as you examine these reviews. First, the comments submitted by this group of technical reviewers are only the first of many CDC expects to receive concerning the draft report, both from affected citizens and the scientific community. For example, a committee of The National Academy of Sciences, comprised of experts in a variety of scientific disciplines, is currently reviewing the Hanford Thyroid Disease Study Draft Final Report and will produce a written evaluation which will be available to the public when completed. We expect that this written evaluation of the HTDS Draft Final Report will be available this summer.

A second important point to remember when examining these review comments is that no changes have yet been made to the draft report based on any comments received to date. The draft report released January 28, 1999 was the same as the report received by the CDC on September 30, 1998. The goal in providing copies of the initial reviewers’ comments on the report is to illustrate the public and scientific review process CDC expects the draft report to undergo and to continue the emphasis on complete openness in both conducting and reporting the results of the Hanford Thyroid Disease Study.